

**NSR Permit Applicability Determination for
Pinnacle Mining Operation**

Submitted to:

**West Virginia Department of Environmental Protection
Division of Air Quality**

Submitted by:



**Pinnacle Mining Company, LLC
Pineville, West Virginia**

Prepared by:

**Patrick Environmental Services, LLC
6920 Rushwood Court
Cincinnati, OH 45241**

April 2015

Handwritten notes on a yellow sticky note:
PDA
15-042
Dan
109-00000

Patrick Environmental Services, LLC

April 17, 2015

Mrs. Bev McKeone
Permitting Section
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

Re: Pinnacle Mining Company, LLC
NSR Permit Applicability Determination for Pinnacle Mining Operation

Dear Mrs. McKeone:

On behalf of Pinnacle Mining Company, LLC (Pinnacle Mine), please find enclosed an original and one copy of the Permit Applicability Determination requesting the Division of Air Quality (DAQ) provide an official determination of Regulation 13 permitting applicability for equipment provided herein that is part of the underground coal mining operation owned and operated by Pinnacle Mining. The mining operation is located near Pineville, West Virginia. This Permit Applicability Determination addresses three existing rock dust bins and an existing gasoline dispensing facility. This Permit Applicability Determination is organized as indicated by the Table of Contents. The Permit Application R13-2183L and the related application to revise Title V Permit R30-10900006-2012 submitted for these emission units on January 24, 2014 is being withdrawn through a separate submittal.

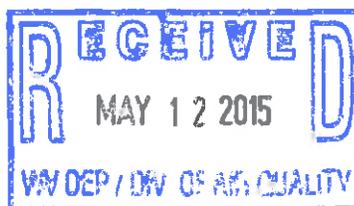
Please call Mr. Mike Isabell at (304) 256-5724 or Mr. Randy Patrick at (513) 508-2001 if you have any questions regarding this application.

Sincerely,

Patrick Environmental Services, LLC



Randy Patrick, P.E.
Project Manager



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April 2015

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WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

601 57th Street, SE
Charleston, WV 25304
(304) 926-0475

www.dep.wv.gov/daq

**APPLICATION FOR NSR PERMIT
AND
TITLE V PERMIT REVISION
(OPTIONAL)**

PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF KNOWN):

- CONSTRUCTION MODIFICATION RELOCATION
 CLASS I ADMINISTRATIVE UPDATE TEMPORARY
 CLASS II ADMINISTRATIVE UPDATE AFTER-THE-FACT

PLEASE CHECK TYPE OF 45CSR30 (TITLE V) REVISION (IF ANY):

- ADMINISTRATIVE AMENDMENT MINOR MODIFICATION
 SIGNIFICANT MODIFICATION

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS ATTACHMENT S TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant (as registered with the WV Secretary of State's Office):
Pinnacle Mining Company, LLC

2. Federal Employer ID No. (FEIN):
06-1697880

3. Name of facility (if different from above):
Pinnacle Mining Operation

4. The applicant is the:
 OWNER OPERATOR BOTH

5A. Applicant's mailing address:
**P.O. Box 338
Pineville, WV 24874**

5B. Facility's present physical address:
**Pinnacle Creek Rd
Pineville, WV 24874**

6. West Virginia Business Registration. Is the applicant a resident of the State of West Virginia? YES NO
– If YES, provide a copy of the Certificate of Incorporation/Organization/Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A.
– If NO, provide a copy of the Certificate of Authority/Authority of L.L.C./Registration (one page) including any name change amendments or other Business Certificate as Attachment A.

7. If applicant is a subsidiary corporation, please provide the name of parent corporation:

8. Does the applicant own, lease, have an option to buy or otherwise have control of the proposed site? YES NO
– If YES, please explain: **Applicant leases the site property from the following owners: Pinnacle Land Company, Heartwood Forest Land Group IV, Berwind Land, McDowell County Commission and Pocahontas Land Co.**
If NO, you are not eligible for a permit for this source.

9. Type of plant or facility (stationary source) to be constructed, modified, relocated, administratively updated or temporarily permitted (e.g., coal preparation plant, primary crusher, etc.): **Three rock dust silos equipped with dust collectors and a gasoline dispensing facility.**

10. North American Industry Classification System (NAICS) code for the facility:
212112

11A. DAQ Plant ID No. (for existing facilities only): N/A	11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): N/A	
<i>All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.</i>		
12A. <ul style="list-style-type: none"> - For Modifications, Administrative Updates or Temporary permits at an existing facility, please provide directions to the <i>present location</i> of the facility from the nearest state road; - For Construction or Relocation permits, please provide directions to the <i>proposed new site location</i> from the nearest state road. Include a MAP as Attachment B. Directions to the Preparation Plant: At Pineville take Route 10 South approximately one mile, turn right onto Route 16 South, travel approximately one mile before turning left onto Pinnacle Creek Road.		
12.B. New site address (if applicable): N/A	12C. Nearest city or town: Pineville	12D. County: Wyoming and McDowell Counties
12.E. UTM Northing (KM): 4,155.40	12F. UTM Easting (KM): 456.10	12G. UTM Zone: 17
13. Briefly describe the proposed change(s) at the facility: Pinnacle is submitting this application for permit applicability determination for three existing rock dust silos equipped with dust collectors and an existing gasoline dispensing facility at the Pinnacle Mining Operation.		
14A. Provide the date of anticipated installation or change: N/A <ul style="list-style-type: none"> - If this is an After-The-Fact permit application, provide the date upon which the proposed change did happen: / / 	14B. Date of anticipated Start-Up if a permit is granted: N/A	
14C. Provide a Schedule of the planned Installation of/ Change to and Start-Up of each of the units proposed in this permit application as Attachment C (if more than one unit is involved).		
15. Provide maximum projected Operating Schedule of activity/activities outlined in this application: Hours Per Day 24 Days Per Week 7 Weeks Per Year 52		
16. Is demolition or physical renovation at an existing facility involved? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
17. Risk Management Plans. If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your Risk Management Plan (RMP) to U. S. EPA Region III.		
18. Regulatory Discussion. List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (<i>if known</i>). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (<i>if known</i>). Provide this information as Attachment D .		
Section II. Additional attachments and supporting documents.		
19. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and 45CSR13).		
20. Include a Table of Contents as the first page of your application package.		

21. Provide a **Plot Plan**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as **Attachment E** (Refer to *Plot Plan Guidance*).

Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).

22. Provide a **Detailed Process Flow Diagram(s)** showing each proposed or modified emissions unit, emission point and control device as **Attachment F**.

23. Provide a **Process Description** as **Attachment G**.

Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H**.

For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I**.

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J**.

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K**.

28. Check all applicable **Emissions Unit Data Sheets** listed below:

<input type="checkbox"/> Bulk Liquid Transfer Operations	<input type="checkbox"/> Haul Road Emissions	<input type="checkbox"/> Quarry
<input type="checkbox"/> Chemical Processes	<input type="checkbox"/> Hot Mix Asphalt Plant	<input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities
<input type="checkbox"/> Concrete Batch Plant	<input type="checkbox"/> Incinerator	<input type="checkbox"/> Storage Tanks
<input type="checkbox"/> Grey Iron and Steel Foundry	<input type="checkbox"/> Indirect Heat Exchanger	

General Emission Unit, specify

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L**.

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

<input type="checkbox"/> Absorption Systems	<input type="checkbox"/> Baghouse	<input type="checkbox"/> Flare
<input type="checkbox"/> Adsorption Systems	<input type="checkbox"/> Condenser	<input type="checkbox"/> Mechanical Collector
<input type="checkbox"/> Afterburner	<input type="checkbox"/> Electrostatic Precipitator	<input type="checkbox"/> Wet Collecting System

Other Collectors, specify

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M**.

30. Provide all **Supporting Emissions Calculations** as **Attachment N**, or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O**.

➤ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and *Example Legal Advertisement* for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

YES NO

➤ If YES, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "*Precautionary Notice – Claims of Confidentiality*" guidance found in the *General Instructions* as **Attachment Q**.

Section III. Certification of Information

34. Authority/Delegation of Authority. Only required when someone other than the responsible official signs the application. Check applicable Authority Form below:

- Authority of Corporation or Other Business Entity
 Authority of Partnership
 Authority of Governmental Agency
 Authority of Limited Partnership

Submit completed and signed Authority Form as Attachment R.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. Certification of Information. To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned Responsible Official / Authorized Representative, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contamination sources identified in this application are in compliance with all applicable requirements.

SIGNATURE: 
(Please use blue ink)

DATE: 
(Please use blue ink)

35B. Printed name of signee: **Jon Lester**

35C. Title: **GENERAL MANAGER**

35D. E-mail: **jon.lester@cliffsnr.com**

36E. Phone: **(304) 256-5226**

36F. FAX: **(304) 732-7938**

36A. Printed name of contact person (if different from above): **Mike Isabell**

36B. Title: **Environmental Manager**

36C. E-mail: **Mike.Isabell@CliffsNR.com**

36D. Phone: **(304) 256-5724**

36E. FAX: **(304) 732-7938**

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate | <input checked="" type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet |
| <input checked="" type="checkbox"/> Attachment B: Map(s) | <input checked="" type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s) |
| <input type="checkbox"/> Attachment C: Installation and Start Up Schedule | <input type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s) |
| <input checked="" type="checkbox"/> Attachment D: Regulatory Discussion | <input checked="" type="checkbox"/> Attachment N: Supporting Emissions Calculations |
| <input checked="" type="checkbox"/> Attachment E: Plot Plan | <input type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input checked="" type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s) | <input type="checkbox"/> Attachment P: Public Notice |
| <input checked="" type="checkbox"/> Attachment G: Process Description | <input type="checkbox"/> Attachment Q: Business Confidential Claims |
| <input checked="" type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input checked="" type="checkbox"/> Attachment R: Authority Forms |
| <input checked="" type="checkbox"/> Attachment I: Emission Units Table | <input type="checkbox"/> Attachment S: Title V Permit Revision Information |
| <input checked="" type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input type="checkbox"/> Application Fee |

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

- Forward 1 copy of the application to the Title V Permitting Group and:*
- For Title V Administrative Amendments:*
 - NSR permit writer should notify Title V permit writer of draft permit,*
- For Title V Minor Modifications:*
 - Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,*
 - NSR permit writer should notify Title V permit writer of draft permit.*
- For Title V Significant Modifications processed in parallel with NSR Permit revision:*
 - NSR permit writer should notify a Title V permit writer of draft permit,*
 - Public notice should reference both 45CSR13 and Title V permits,*
 - EPA has 45 day review period of a draft permit.*

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

**ATTACHMENT A
BUSINESS CERTIFICATE**

**WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION
CERTIFICATE**

ISSUED TO:
**PINNACLE MINING COMPANY LLC
PINEVILLE RD
PINEVILLE, WV 24874**

BUSINESS REGISTRATION ACCOUNT NUMBER: 1006-9836

This certificate is issued on: 06/30/2010

*This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with W.Va. Code § 11-12.*

*The person or organization identified on this certificate is registered
to conduct business in the State of West Virginia at the location above.*

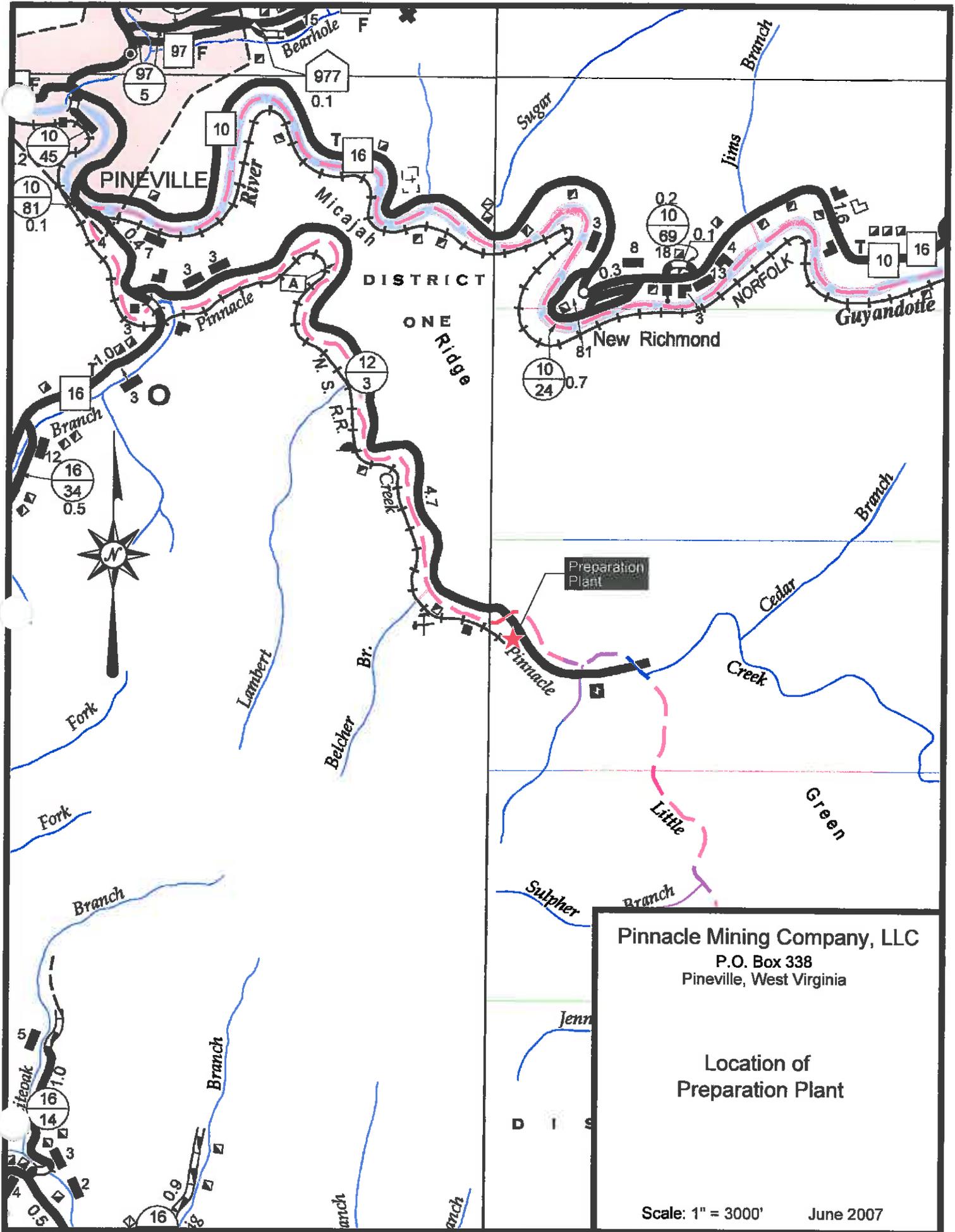
This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

**TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of
this certificate displayed at every job site within West Virginia.**

ATTACHMENT B
MAP



Pinnacle Mining Company, LLC

P.O. Box 338
Pineville, West Virginia

Location of
Preparation Plant

Scale: 1" = 3000' June 2007

ATTACHMENT C
INSTALLATION AND START-UP SCHEDULE (NOT APPLICABLE)

**ATTACHMENT D
REGULATORY REVIEW**

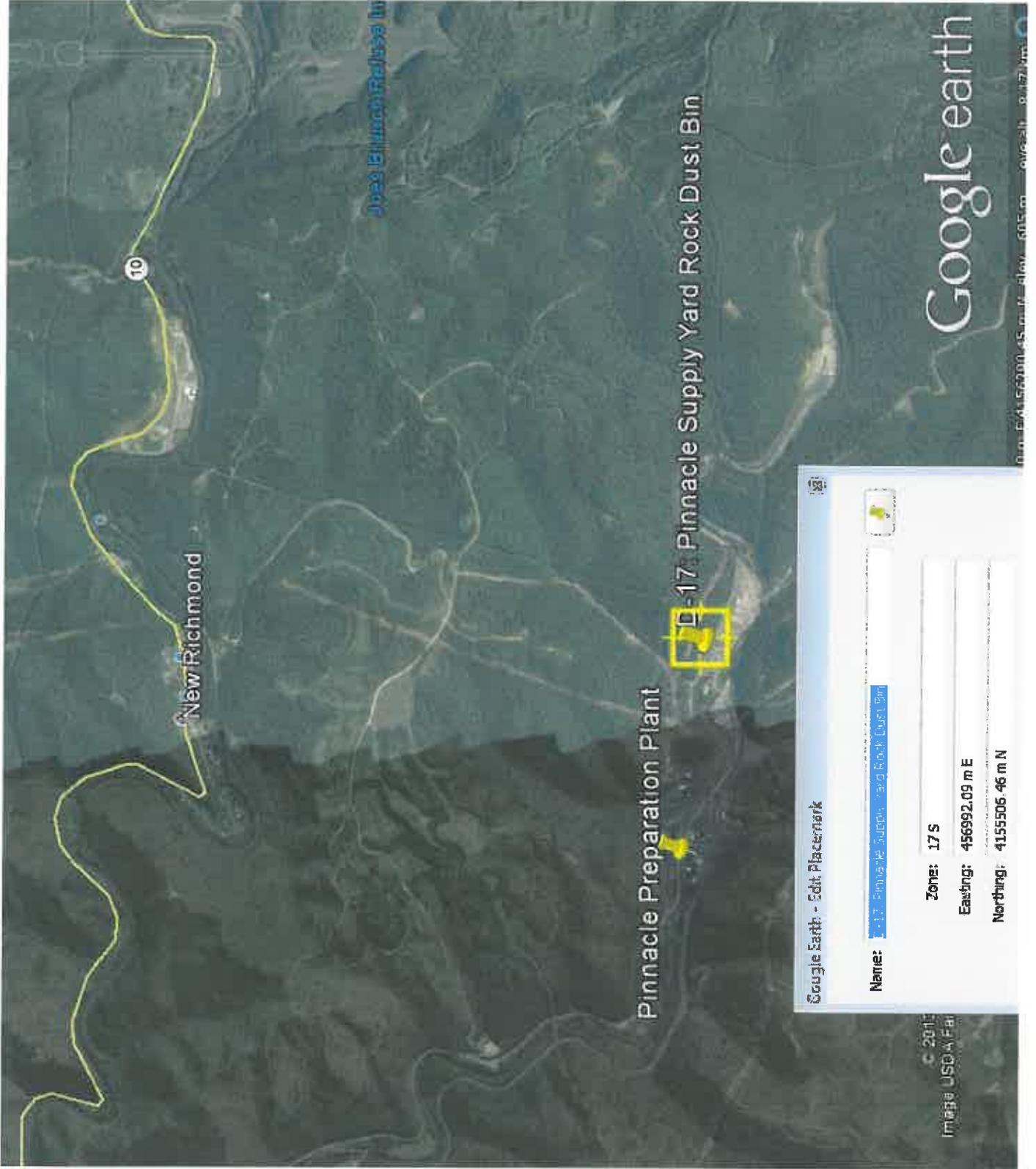
ATTACHMENT D
REGULATORY DISCUSSION

Pinnacle Mining is submitting this permit determination for three existing rock dust bins and an existing gasoline dispensing facility (GDF), which are under the control of the underground mining operation manager, not the Pinnacle Preparation Plant manager. The rock dust bins are used solely in the operation of the underground coal mines. The GDF is used for fueling Pinnacle Mining's fleet vehicles at the Pineville area operations; it is not used to fuel the water truck used for controlling dust from the haul roads of the Preparation Plant. Given this and the distances from the Preparations Plant (*See*, Project Description) the rock dust bins and GDF are considered to be part of the Mining Operation rather than the Pinnacle Preparation Plant. As such, these units are not required to be in the Pinnacle Mining Preparation Plant Regulation 13 Permit or Title V Permit as clarified by the Department of Environmental Protection's Division of Air Quality (DAQ) during Pinnacle Mining's March 20, 2015 meeting with the agency.

The resulting emission increases for each emission unit included in this permit determination request are less than the 6 pounds per hour and 10 tons per year criteria pollutant trigger levels for a West Virginia Regulation 13 Permit (45CSR13 2.24b). However, the gasoline storage tank and fueling station meet the definition of a GDF, and thus, are subject to the Maximum Available Control Technology (MACT) standards in 40 CFR 63, Subpart CCCCCC. The GDF gasoline storage tank will have a throughput of less than 10,000 gallons per month and will be operated in accordance with the standards and terms for such throughput as indicated in the subpart. Pinnacle Mining's GDF is not required to be equipped with submerged fill or a vapor balance system, which are required for GDFs with larger throughput volumes. Based on Pinnacle Mining's March 20, 2015 meeting with DAQ, the agency does not consider the provisions of 40 CFR 63, Subpart CCCCCC for GDFs with a monthly throughput of less than 10,000 gallons to be substantive requirements for purposes of Regulation 13 applicability. Furthermore, the rock dust bins are not subject to any substantive requirements.

Based on the resulting emissions being less than permitting triggers and that there are no substantive requirements for any of the emission units, Pinnacle Mining has concluded that a permit is not needed and is submitting this permit determination to request an official determination of permitting applicability from the DAQ.

ATTACHMENT E
PLOT PLANS



New Richmond

10

Pinnacle Preparation Plant

D-17 Pinnacle Supply Yard Rock Dust Bin

Google Earth - Edit Placemark

Name: D-17 Pinnacle Supply Yard Rock Dust Bin

Zone: 17S

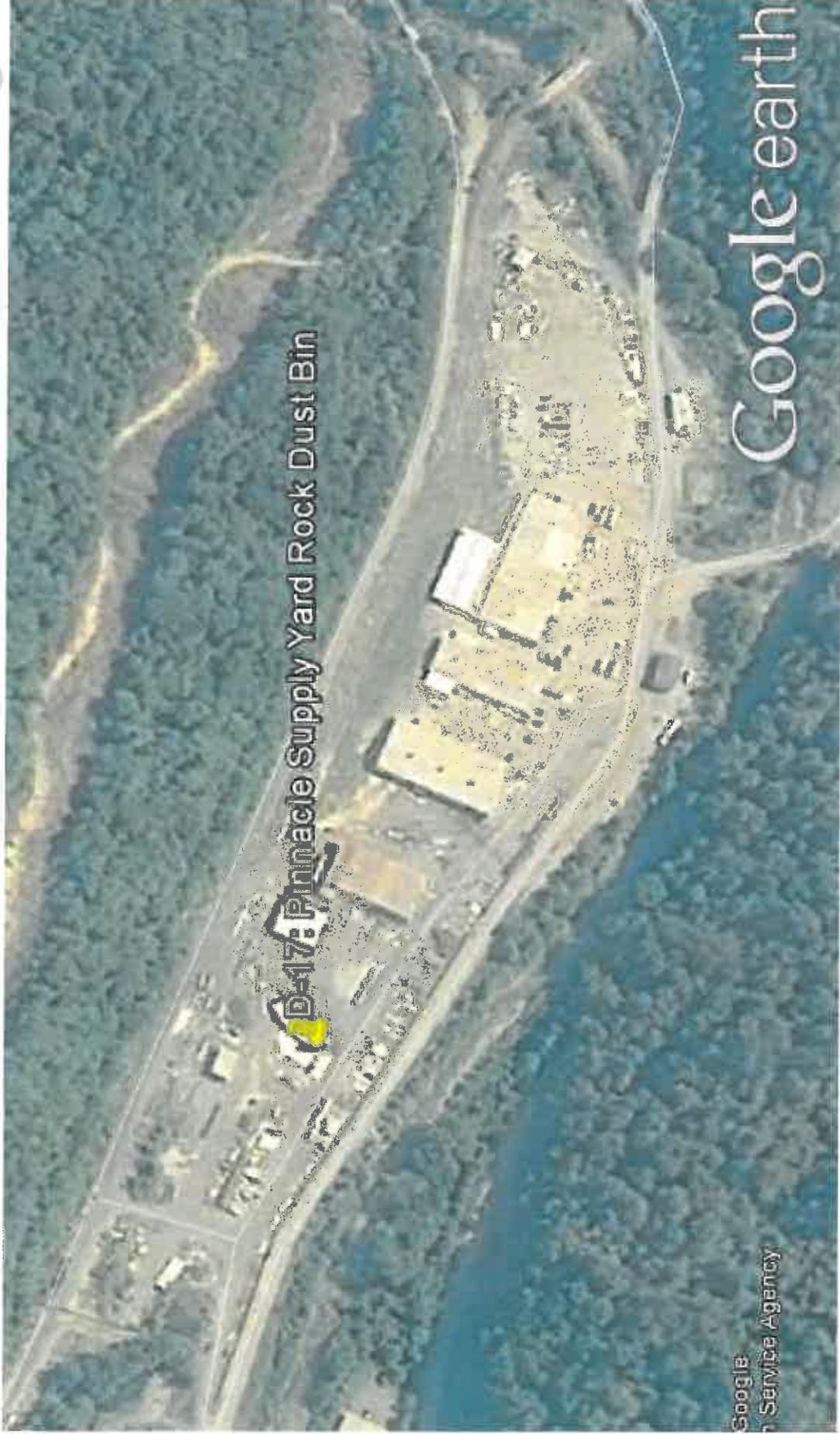
Easting: 456992.09 m E

Northing: 4155506.46 m N

Google earth

© 2013
Image USA, Fair

0m 544.57000 45 m 605 m 8.17 km



D-17: Pinnacle Supply Yard Rock Dust Bin

Google
Service Agency

Google earth

Pinnacle Preparation Plant

D-18: White Oak Rock Dust Bin

Google Earth - Edit Placemark

Name:

Zone: 17 S

Easting: 452167.27 m E

Northing: 4152654.36 m N

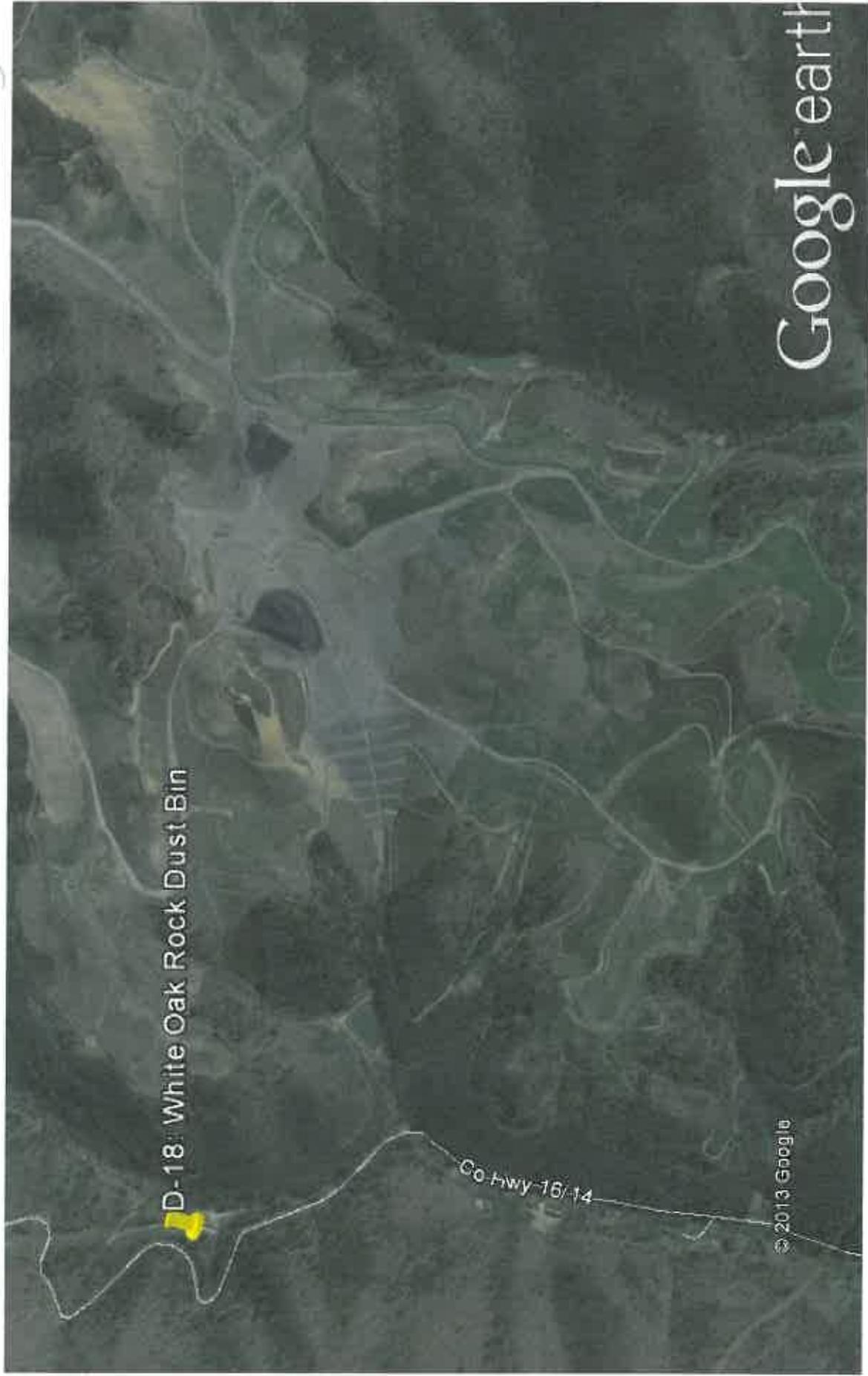
Google earth

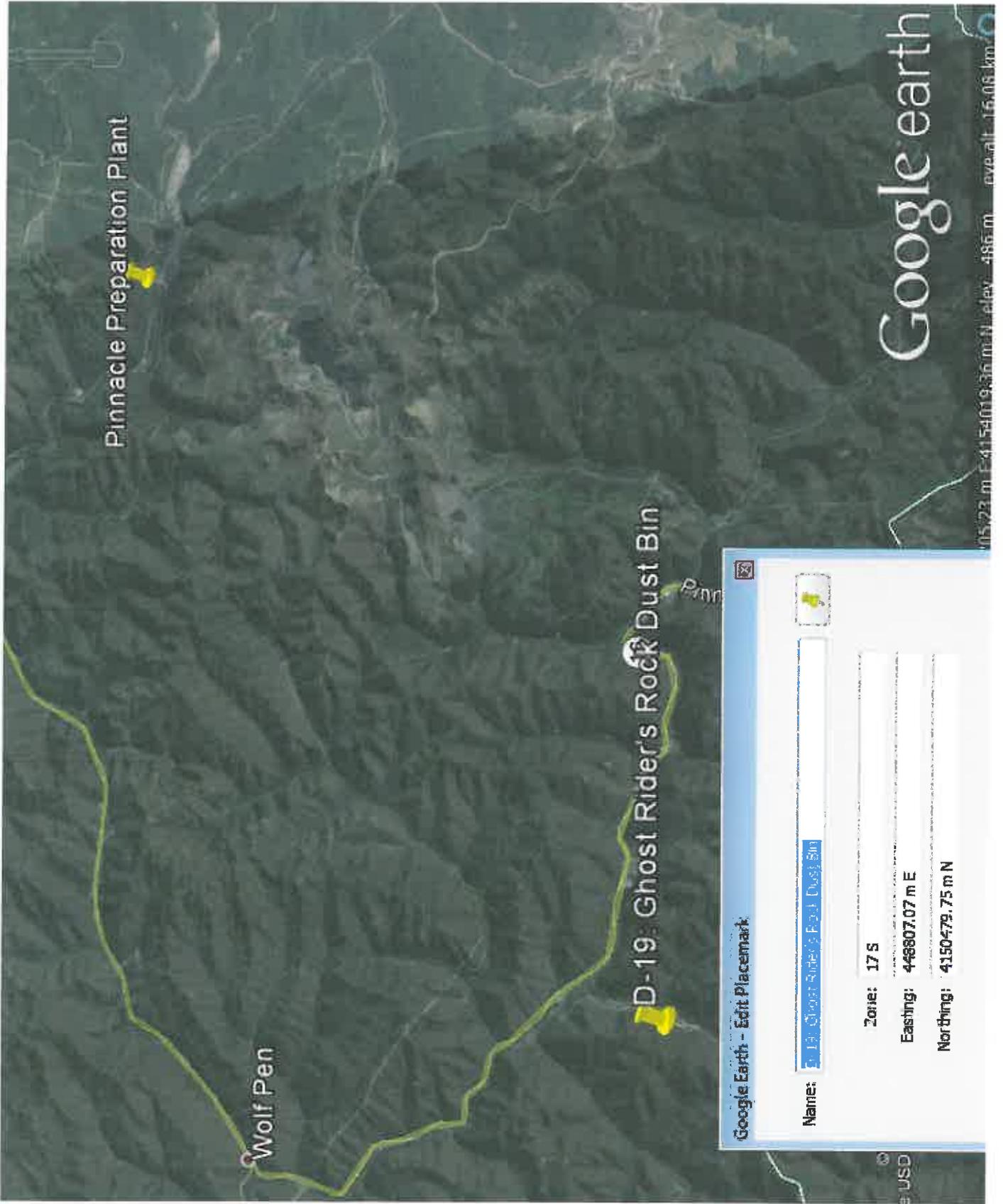
D-18 White Oak Rock Dust Bin

Co Hwy 16/14

© 2013 Google

Google earth





Pinnacle Preparation Plant

Wolf Pen

D-19: Ghost Rider's Rock Dust Bin

Google Earth - Edit Placemark

Name:

Zone: 17 S

Easting: 446807.07 m E

Northing: 4150479.75 m N

Google earth

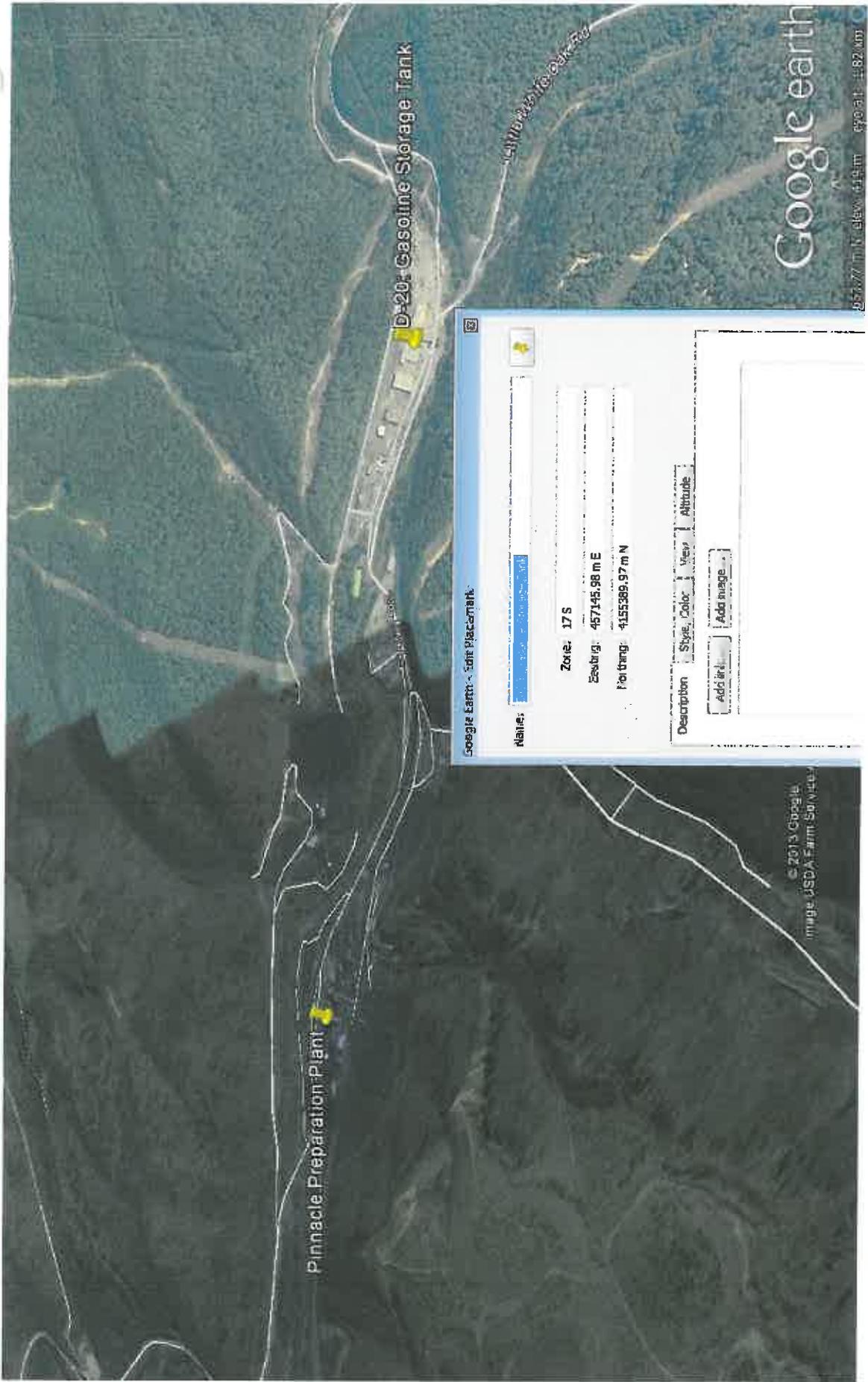
105.723 m E 4154009.36 m N elev. 485 m over alt. 16.06 km



D-19: Ghost Rider's Rock Dust Bin

© 2013 Google

Google earth



Pinnacle Preparation Plant

D-20 Gasoline Storage Tank

Google Earth - Point Placement

Name:

Zone: 17S

Easting: 457145.98 m E

Northing: 4155389.97 m N

Description Style Color View Altitude

Add link Add image

Google earth

© 2013 Google
Image USDA Farm Service Agency



D-20: Gasoline Storage Tank

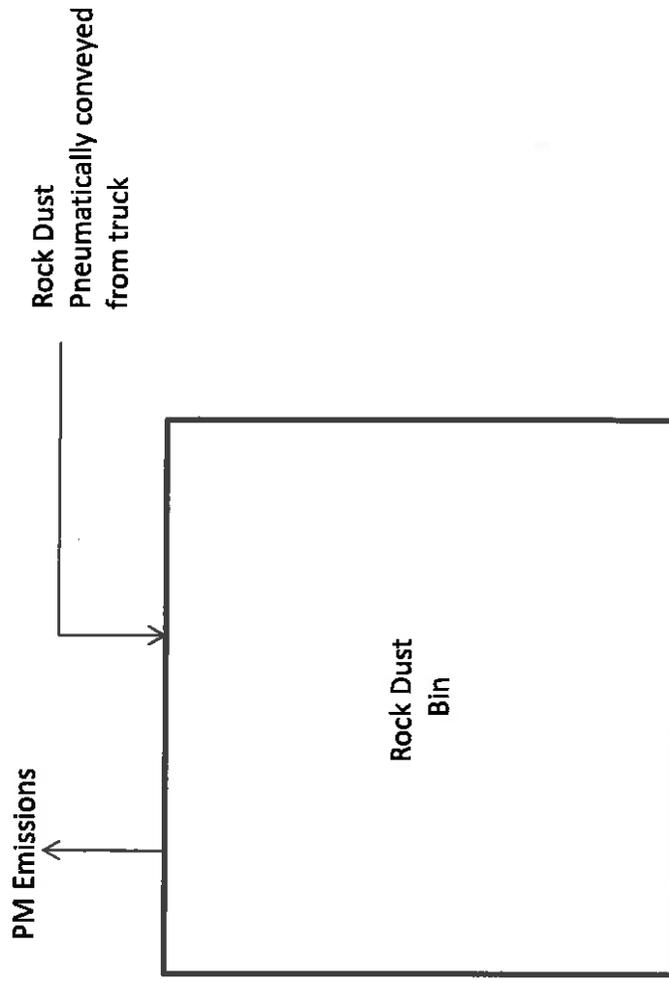
© 2013 Google
Image: USDA Farm Service Agency

Google earth

Imagery Date: 7/9/2014 17°S 457106.37 m E 4155545.63 m N elev: 438 m eye alt: 1.04 km

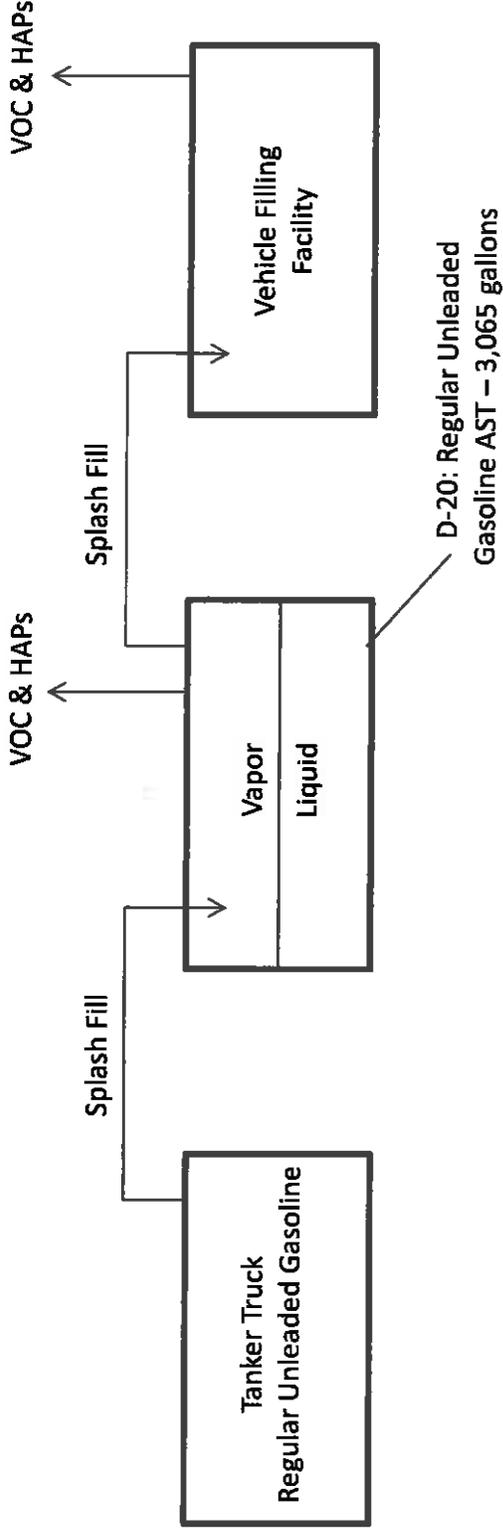
ATTACHMENT F
DETAILED PROCESS FLOW DIAGRAMS

Pinnacle Mining Company, LLC
D-17, D-18 & D-19: Rock Dust Bins



One 150 ton and two 100 ton rock dust bins.

Pinnacle Mining Company, LLC
D-20: Gasoline Storage and Dispensing



ATTACHMENT G
PROCESS DESCRIPTION

ATTACHMENT G PROCESS DESCRIPTION

Pinnacle Mining Company, LLC (Pinnacle Mining) conducts underground coal mining operations along the Pocahontas coal seam at the Pinnacle Mine located near Pineville, West Virginia. These mining operations are located adjacent to the Pinnacle Preparation Plant, but extend out approximately 10 miles beyond the plant. Pinnacle Mining is submitting this permit applicability determination for three existing rock dust bins and an existing gasoline dispensing facility (GDF), which are under the control of the underground mining operation manager, not the Pinnacle Preparation Plant manager. Distances from the bins and GDF to the Preparation Plant are included below as evidence they operate independent of the Pinnacle Preparation Plant.

Rock dusting is used during underground mining operations to prevent coal dust explosions that can occur due to airborne fine coal dust particles. Incombustible rock dust is sprayed on the mine workings to increase the incombustible content of the airborne dust particles. The maximum potential usage of rock dust is conservatively estimated to be 3,120 tons per year of rock dust. This NSR permit applicability determination includes the following three existing rock dust bins, equipped to prevent product loss during pneumatic filling. These bins are part of the coal mining operation, not part of the preparation plant:

- D-17: 100 ton Rock Dust Bin located at the Pinnacle Supply Yard ~ 0.7 miles ground distance from the Pinnacle Preparation Plant.
- D-18: 100 ton Rock Dust Bin located at the White Oak Mine Shaft ~ 3.0 miles ground distance from the Pinnacle Preparation Plant.
- D-19: 150 ton Rock Dust Bin located at the Ghost Riders Hollow Mine Shaft ~ 5.5 miles ground distance from the Pinnacle Preparation Plant.

This permit applicability determination also addresses an existing 3,065-gallon unleaded gasoline storage tank and associated fueling station, D-20, that is operated by the Pinnacle Mining Operation. The storage tank is located at the Pinnacle Mining Warehouse and is approximately ~ 0.8 ground distance miles from the Pinnacle Mining Preparation Plant. The gasoline storage tank and fuel station, equipped with a single pump, meet the definition of a gasoline dispensing facility (GDF), and therefore, are subject to the MACT standards in Subpart CCCCC. The GDF has a monthly maximum throughput of less than 10,000 gallons and is used for fueling Pinnacle Mining's fleet vehicles; it is not used to fuel the truck used to water the haul roads of the Preparation Plant.

Based on the detail provided in this Process Description and in the Regulatory Review (Attachment D), Pinnacle Mining has concluded that the equipment in this request is not part of the Pinnacle Preparation Plant and a permit is not needed. Pinnacle Mining is submitting this permit applicability determination to request an official determination of permitting applicability from the Department of Environmental Protection's Division of Air Quality (DAQ). Process flow diagrams are included in Attachment F and the potential to emit calculations are included in Attachment N.

ATTACHMENT H
MATERIAL SAFETY DATA SHEET

Material Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

1. Product and Company Identification	
Product Name	MSDS Code Number
Trade Name & Synonyms Crushed aggregate, limestone sand, aglime, mineral filler	Date of Last Revision 2/20/97
Chemical Name Dolomitic Limestone	Manufacturer E. Dillon & Company
C.A.S. Number	Address P.O. Box 160 Swords Creek, VA 24649
Grades or Minor Variant Identifiers	Information Telephone Number (276) 873-6816
	Foreign Emergency Telephone Number n/a
Product Use (for Canada)	Emergency Telephone Number (276) 608-0275

2. Composition/Information on Ingredients			
Hazardous Components	C.A.S. Number	Exposure Limits	%
Limestone*		OSHA: 15 (total dust) mg/m³	100
*Composition varies naturally-- typically contains quartz (silica)		ACGIH: 10 (total dust) mg/m³	1
OSHA Regulatory Status			

3. Hazards Identification					
Emergency Overview					
Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)
Eye					
Skin					
Inhalation					
Ingestion					
Other					
Medical Conditions Aggravated by Exposure Inhaling respirable dust and/or crystalline silica may aggravate existing respiratory system disease					
Carcinogenicity (OSHA, IARC, NTP) None					
Potential Environmental Effects					

4. First Aid Measures

Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	Flush with running water.		
Skin	Wash with soap and water.		
Inhalation	Remove to fresh air.		
Ingestion			
Other			

Note to Physicians (Treatment, Testing, and Monitoring)

5. Fire Fighting Measures

Flashpoint: Method:	Flammable (Explosive) Limits in Air LEL UEL	Autoflignition Temperature	Other
n/a	n/a	n/a	
Flame Propagation or Burning Rate (for solids)	Properties Contributing to Fire Intensity	Flammability Classification	
n/a	n/a	n/a	
Extinguishing Media	Extinguishing Media to Avoid	Reasons to Extinguishing Media	
n/a	n/a	n/a	
Protection and Procedures for Firefighters			
None			
Unusual Fire and Explosion Hazards			
None known.			

6. Accidental Release Measures

Containment Techniques	None
Spill/Leak Clean-up Procedures and Equipment	Material can be handled as normal solid waste.
Evacuation Procedures	None known
Special Instructions	None known
Reporting Requirements	None known

7. Handling and Storage

Handling Practices and Warnings	
Storage Practices and Warnings	

8. Exposure Control/Personal Protection

Ventilation Local or general exhaust	Other Engineering Controls n/a	
Routes of Entry:	Personal Protective Equipment (PPE) for Normal Use:	PPE for Emergencies:
Eyes/Face	Safety glasses	Same
Skin	None	Same
Inhalation	NIOSH - MSHA	Same
General Hygiene Considerations and Work Practices Wash dust-exposed skin with soap and water. Wash work clothes after each use.		
Protective Measures During Repair and Maintenance of Contaminated Equipment None		
Other Protective Measures and Equipment None		

9. Physical and Chemical Properties

Appearance Grey, various sized		Odor None
Normal Physical State: <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input checked="" type="checkbox"/> Solids <input type="checkbox"/> _____ (Other)		Boiling Point °F N/a Melting Point °F N/a Freezing Point °F N/a
Specific Gravity or Density (H₂O = 1) 2.7 - 2.8	Solubility in Water --0--	pH n/a
Vapor Pressure (mm Hg) n/a	Vapor Density (AIR = 1) n/a	Evaporation Rate (Butyl Acetate = 1) 0
Other		

10. Stability and Reactivity

Incompatibility (Materials to Avoid) None	
Hazardous Products Produced During Decomposition None known.	
Hazardous Polymerization? <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur	Conditions to Avoid None known
Stability? <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	Conditions to Avoid None known

11. Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data

-n/a-

12. Ecological Information	
Toxicity, Environmental Fate, Physical/Chemical Data, or Other Data Supporting Environmental Hazard Statements	
-n/a-	

13. Disposal Considerations	
Regulations Dispose of waste material in accordance with applicable federal, state, and local laws.	
Properties (Physical/Chemical) Affecting Disposal Material can be handled as normal solid waste.	
NOTE: State or local requirements may differ from federal regulations. Processing or using this product may make the information here inappropriate. Waste generators are responsible for waste classification, transport, and disposal.	

14. Transport Information		
Regulated for shipping? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Proper Shipping Name	Packing Group
Do changes in quantity, packaging, or shipment method change product classification? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Hazard Class -n/a-	Identification Number
Other		

15. Regulatory Information	
Federal Regulations (OSHA, TSCA, CERCLA, FIFRA, EPCRA, CAA, CWA, SDWA, CPSC, DEA, FDA/USDA, etc.)	
State Regulations -n/a-	
International Regulations	
Other	

16. Other Information	
Label Text, Hazard Rating Systems, Key Legend, or Other	
-n/a-	

NOTE: OSHA's Hazard Communication Standard (29 CFR 1910.1200) does not require the information requested in Sections 11, 12, 13, 14, 15, and 16 for MSDSs. If your company chooses not to fill in these sections, you may wish to enter something (like N/R for "not required" or N/A for "not applicable") to indicate that the field is purposely being left blank.

**ATTACHMENT I
EMISSION UNIT TABLE**

ATTACHMENT J
EMISSION POINT DATA SUMMARY SHEET

**Attachment J
EMISSION POINTS DATA SUMMARY SHEET**

Table 1: Emissions Data

Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type ¹	Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan)		Air Pollution Control Device (Must match Emission Units Table & Plot Plan)		Vent Time for Emission Unit (chemical processes only)		All Regulated Pollutants - Chemical Name/CAS ³ (Speciate VOCs & HAPs)	Maximum Potential Uncontrolled Emissions ⁴		Maximum Potential Controlled Emissions ⁵		Emission Form or Phase (At exit conditions, Solid, Liquid or Gas/Vapor)	Est. Method Used ⁶	Emission Concentration ⁷ (ppmv or mg/m ³)
		ID No.	Source	ID No.	Device Type	Short Term ²	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
D-17 - D-19 (Combined)	Clean air outlet	D-17 - D-19	Rock Dust Bins	N/A	N/A	4 hr/day	125	PM10	1.53	0.10	1.53	0.10	Solid	O	181
D-20	Relief vent	D-20	AST	N/A	N/A	N/A	8,760	VOC	0.10	0.45	0.10	0.45	Gas	O	varies

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

- ¹ Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.
- ² Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (ie., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).
- ³ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. DO NOT LIST H₂, H₂O, N₂, O₂, and Noble Gases.
- ⁴ Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- ⁵ Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- ⁶ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (AP-42).
- ⁷ Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m³) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO₂, use units of ppmv (See 45CSR10).

ATTACHMENT K
FUGITIVE EMISSIONS DATA SUMMARY SHEET

Attachment K

FUGITIVE EMISSIONS DATA SUMMARY SHEET

The FUGITIVE EMISSIONS SUMMARY SHEET provides a summation of fugitive emissions. Fugitive emissions are those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Note that uncaptured process emissions are not typically considered to be fugitive, and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET.

Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions).

APPLICATION FORMS CHECKLIST - FUGITIVE EMISSIONS
1.) Will there be haul road activities? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If YES, then complete the HAUL ROAD EMISSIONS UNIT DATA SHEET.
2.) Will there be Storage Piles? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete Table 1 of the NONMETALLIC MINERALS PROCESSING EMISSIONS UNIT DATA SHEET.
3.) Will there be Liquid Loading/Unloading Operations? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If YES, complete the BULK LIQUID TRANSFER OPERATIONS EMISSIONS UNIT DATA SHEET.
4.) Will there be emissions of air pollutants from Wastewater Treatment Evaporation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.
5.) Will there be Equipment Leaks (e.g. leaks from pumps, compressors, in-line process valves, pressure relief devices, open-ended valves, sampling connections, flanges, agitators, cooling towers, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the LEAK SOURCE DATA SHEET section of the CHEMICAL PROCESSES EMISSIONS UNIT DATA SHEET.
6.) Will there be General Clean-up VOC Operations? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.
7.) Will there be any other activities that generate fugitive emissions? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET or the most appropriate form.
If you answered "NO" to all of the items above, it is not necessary to complete the following table, "Fugitive Emissions Summary."

FUGITIVE EMISSIONS SUMMARY		All Regulated Pollutants ¹ Chemical Name/CAS ¹	Maximum Potential Uncontrolled Emissions ²		Maximum Potential Controlled Emissions ³		Est. Method Used ⁴
			lb/hr	ton/yr	lb/hr	ton/yr	
Haul Road/Road Dust Emissions Paved Haul Roads		PM10	0.66	0.004	0.66	0.004	O
Unpaved Haul Roads							
Storage Pile Emissions							
Loading/Unloading Operations		VOC	0.10	0.43	0.10	0.43	O
Wastewater Treatment Evaporation & Operations							
Equipment Leaks			Does not apply		Does not apply		
General Clean-up VOC Emissions							
Other							

¹ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. DO NOT LIST H₂, H₂O, N₂, O₂, and Noble Gases.

² Give rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

³ Give rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

⁴ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (AP-42).

ATTACHMENT L
EMISSION UNIT DATA SHEET

**Attachment L
EMISSIONS UNIT DATA SHEET
GENERAL**

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*):

<p>1. Name or type and model of proposed affected source:</p> <p>D-17: 100 ton rock dust bin D-18: 100 ton rock dust bin D-19: 150 ton rock dust bin</p> <p><small>* Each bin is equipped with a device to prevent the loss of material during filling, which is an inherent part of the process rather than a control device.</small></p>
<p>2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.</p>
<p>3. Name(s) and maximum amount of proposed process material(s) charged per hour:</p> <p>Rock dust: 25 ton/hr</p>
<p>4. Name(s) and maximum amount of proposed material(s) produced per hour:</p> <p>Rock dust: 25 ton/hr</p>
<p>5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:</p> <p>N/A</p>

* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable): N/A		
(a) Type and amount in appropriate units of fuel(s) to be burned:		
(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:		
(c) Theoretical combustion air requirement (ACF/unit of fuel):		
@	°F and	psia.
(d) Percent excess air:		
(e) Type and BTU/hr of burners and all other firing equipment planned to be used:		
(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:		
(g) Proposed maximum design heat input:		
		× 10 ⁶ BTU/hr.
7. Projected operating schedule: *125 hr/yr *See, Emission Calculations		
Hours/Day	Days/Week	Weeks/Year

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:				
@	ambient	°F and	unknown	psia
a.	NO _x	N/A	lb/hr	N/A grains/ACF
b.	SO ₂	N/A	lb/hr	N/A grains/ACF
c.	CO	N/A	lb/hr	N/A grains/ACF
d.	PM ₁₀	1.53 (combined as only one bin will be filled at a time)	lb/hr	0.08 (combined as only one bin will be filled at a time) grains/ACF
e.	Hydrocarbons	N/A	lb/hr	N/A grains/ACF
f.	VOCs	N/A	lb/hr	N/A grains/ACF
g.	Pb	N/A	lb/hr	N/A grains/ACF
h.	Specify other(s)		lb/hr	grains/ACF
			lb/hr	grains/ACF
			lb/hr	grains/ACF
			lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

<p>9. Proposed Monitoring, Recordkeeping, Reporting, and Testing Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.</p>	
<p>MONITORING</p> <p>No monitoring is required to demonstrate compliance because the potential emissions are well under the allowable emission rate of 31 lb/hr established in 45C.S.R.7-3.1.</p>	<p>RECORDKEEPING</p> <p>The total amount of rock dust purchased from vendors during the calendar year will be recorded and kept on file.</p>
<p>REPORTING</p> <p>None</p>	<p>TESTING</p> <p>No testing is required to demonstrate compliance because the potential emissions are well under the allowable emission rate of 31 lb/hr established in 45C.S.R.7-3.1.</p>
<p>MONITORING. PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.</p> <p>RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.</p> <p>REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.</p> <p>TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.</p>	
<p>10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty</p> <p>Loaded pneumatically at a maximum rate of 25 tons/hr.</p>	

Attachment L
EMISSIONS UNIT DATA SHEET
STORAGE TANKS

Provide the following information for each new or modified bulk liquid storage tank as shown on the *Equipment List Form* and other parts of this application. A tank is considered modified if the material to be stored in the tank is different from the existing stored liquid.

IF USING US EPA'S TANKS EMISSION ESTIMATION PROGRAM (AVAILABLE AT www.epa.gov/tnn/tanks.html), APPLICANT MAY ATTACH THE SUMMARY SHEETS IN LIEU OF COMPLETING SECTIONS III, IV, & V OF THIS FORM. HOWEVER, SECTIONS I, II, AND VI OF THIS FORM MUST BE COMPLETED. US EPA'S AP-42, SECTION 7.1, "ORGANIC LIQUID STORAGE TANKS," MAY ALSO BE USED TO ESTIMATE VOC AND HAP EMISSIONS (<http://www.epa.gov/tnn/chief/>)

I. GENERAL INFORMATION (required)

1. Bulk Storage Area Name <u>Warehouse Fuel Station</u>	2. Tank Name <u>Warehouse Unleaded Fuel Tank D-20</u>
3. Tank Equipment Identification No. (as assigned on <i>Equipment List Form</i>) <u>D-20</u>	4. Emission Point Identification No. (as assigned on <i>Equipment List Form</i>)
5. Date of Commencement of Construction (for existing tanks) <u>2013</u>	
6. Type of change <input type="checkbox"/> New Construction <input type="checkbox"/> New Stored Material <input checked="" type="checkbox"/> Other Tank Modification	
7. Description of Tank Modification (if applicable) <u>This applicability determination includes an existing 3,065-gallon unleaded gasoline storage tank and associated fueling station, D-20, that is operated by the Pinnacle Mining Operation. The GDF is used for fueling Pinnacle Mining's fleet vehicles; it is not used to fuel the truck used to water the haul roads of the Preparation Plant.</u>	
7A. Does the tank have more than one mode of operation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (e.g. Is there more than one product stored in the tank?)	
7B. If YES, explain and identify which mode is covered by this application (Note: A separate form must be completed for each mode). <u>N/A</u>	
7C. Provide any limitations on source operation affecting emissions, any work practice standards (e.g. production variation, etc.): <u>N/A</u>	

II. TANK INFORMATION (required)

8. Design Capacity (specify barrels or gallons). Use the internal cross-sectional area multiplied by internal height. <u>3,065 gallons</u>	
9A. Tank Internal Diameter (ft) <u>5.33</u>	9B. Tank Internal Height (or Length) (ft) <u>18.33</u>
10A. Maximum Liquid Height (ft) <u>5.25</u>	10B. Average Liquid Height (ft) <u>2.20</u>
11A. Maximum Vapor Space Height (ft) <u>5.25</u>	11B. Average Vapor Space Height (ft) <u>2.13</u>
12. Nominal Capacity (specify barrels or gallons). This is also known as "working volume" and considers design liquid levels and overflow valve heights. <u>3,065 gallons</u>	

13A. Maximum annual throughput (gal/yr) 37,000	13B. Maximum daily throughput (gal/day) 200
14. Number of Turnovers per year (annual net throughput/maximum tank liquid volume) 12	
15. Maximum tank fill rate (gal/min) 200	
16. Tank fill method <input type="checkbox"/> Submerged <input checked="" type="checkbox"/> Splash <input type="checkbox"/> Bottom Loading	
17. Complete 17A and 17B for Variable Vapor Space Tank Systems <input checked="" type="checkbox"/> Does Not Apply	
17A. Volume Expansion Capacity of System (gal)	17B. Number of transfers into system per year
18. Type of tank (check all that apply): <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> vertical <input checked="" type="checkbox"/> horizontal <input type="checkbox"/> flat roof <input type="checkbox"/> cone roof <input type="checkbox"/> dome roof <input type="checkbox"/> other (describe) <input type="checkbox"/> External Floating Roof <input type="checkbox"/> pontoon roof <input type="checkbox"/> double deck roof <input type="checkbox"/> Domed External (or Covered) Floating Roof <input type="checkbox"/> Internal Floating Roof <input type="checkbox"/> vertical column support <input type="checkbox"/> self-supporting <input type="checkbox"/> Variable Vapor Space <input type="checkbox"/> lifter roof <input type="checkbox"/> diaphragm <input type="checkbox"/> Pressurized <input type="checkbox"/> spherical <input type="checkbox"/> cylindrical <input type="checkbox"/> Underground <input type="checkbox"/> Other (describe)	

III. TANK CONSTRUCTION & OPERATION INFORMATION (optional if providing TANKS Summary Sheets)

19. Tank Shell Construction: <input type="checkbox"/> Riveted <input type="checkbox"/> Gunit lined <input type="checkbox"/> Epoxy-coated rivets <input checked="" type="checkbox"/> Other (describe) <u>welded</u>		
20A. Shell Color <u>White</u>	20B. Roof Color <u>White</u>	20C. Year Last Painted <u>Unknown</u>
21. Shell Condition (if metal and unlined): <input type="checkbox"/> No Rust <input checked="" type="checkbox"/> Light Rust <input type="checkbox"/> Dense Rust <input type="checkbox"/> Not applicable		
22A. Is the tank heated? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
22B. If YES, provide the operating temperature (°F)		
22C. If YES, please describe how heat is provided to tank.		
23. Operating Pressure Range (psig): <u>-0.03</u> to <u>0.03</u>		
24. Complete the following section for Vertical Fixed Roof Tanks <input checked="" type="checkbox"/> Does Not Apply		
24A. For dome roof, provide roof radius (ft)		
24B. For cone roof, provide slope (ft/ft)		
25. Complete the following section for Floating Roof Tanks <input checked="" type="checkbox"/> Does Not Apply		
25A. Year Internal Floaters Installed:		
25B. Primary Seal Type: <input type="checkbox"/> Metallic (Mechanical) Shoe Seal <input type="checkbox"/> Liquid Mounted Resilient Seal <input type="checkbox"/> Vapor Mounted Resilient Seal <input type="checkbox"/> Other (describe):		
25C. Is the Floating Roof equipped with a Secondary Seal? <input type="checkbox"/> YES <input type="checkbox"/> NO		
25D. If YES, how is the secondary seal mounted? (check one) <input type="checkbox"/> Shoe <input type="checkbox"/> Rim <input type="checkbox"/> Other (describe):		
25E. Is the Floating Roof equipped with a weather shield? <input type="checkbox"/> YES <input type="checkbox"/> NO		

25F. Describe deck fittings; indicate the number of each type of fitting:		
ACCESS HATCH		
BOLT COVER, GASKETED:	UNBOLTED COVER, GASKETED:	UNBOLTED COVER, UNGASKETED:
AUTOMATIC GAUGE FLOAT WELL		
BOLT COVER, GASKETED:	UNBOLTED COVER, GASKETED:	UNBOLTED COVER, UNGASKETED:
COLUMN WELL		
BUILT-UP COLUMN – SLIDING COVER, GASKETED:	BUILT-UP COLUMN – SLIDING COVER, UNGASKETED:	PIPE COLUMN – FLEXIBLE FABRIC SLEEVE SEAL:
LADDER WELL		
PIP COLUMN – SLIDING COVER, GASKETED:	PIPE COLUMN – SLIDING COVER, UNGASKETED:	
GAUGE-HATCH/SAMPLE PORT		
SLIDING COVER, GASKETED:	SLIDING COVER, UNGASKETED:	
ROOF LEG OR HANGER WELL		
WEIGHTED MECHANICAL ACTUATION, GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	SAMPLE WELL-SLIT FABRIC SEAL (10% OPEN AREA)
VACUUM BREAKER		
WEIGHTED MECHANICAL ACTUATION, GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	
RIM VENT		
WEIGHTED MECHANICAL ACTUATION GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	
DECK DRAIN (3-INCH DIAMETER)		
OPEN:	90% CLOSED:	
STUB DRAIN		
1-INCH DIAMETER:		
OTHER (DESCRIBE, ATTACH ADDITIONAL PAGES IF NECESSARY)		

26. Complete the following section for Internal Floating Roof Tanks <input checked="" type="checkbox"/> Does Not Apply	
26A. Deck Type: <input type="checkbox"/> Bolted <input type="checkbox"/> Welded	
26B. For Bolted decks, provide deck construction:	
26C. Deck seam: <input type="checkbox"/> Continuous sheet construction 5 feet wide <input type="checkbox"/> Continuous sheet construction 6 feet wide <input type="checkbox"/> Continuous sheet construction 7 feet wide <input type="checkbox"/> Continuous sheet construction 5 × 7.5 feet wide <input type="checkbox"/> Continuous sheet construction 5 × 12 feet wide <input type="checkbox"/> Other (describe)	
26D. Deck seam length (ft)	26E. Area of deck (ft ²)
For column supported tanks:	26G. Diameter of each column:
26F. Number of columns:	

IV. SITE INFORMATION (optional if providing TANKS Summary Sheets) [See TANKS Report](#)

27. Provide the city and state on which the data in this section are based.
28. Daily Average Ambient Temperature (°F)
29. Annual Average Maximum Temperature (°F)
30. Annual Average Minimum Temperature (°F)
31. Average Wind Speed (miles/hr)
32. Annual Average Solar Insulation Factor (BTU/(ft ² ·day))
33. Atmospheric Pressure (psia)

V. LIQUID INFORMATION (optional if providing TANKS Summary Sheets) [See TANKS Report](#)

34. Average daily temperature range of bulk liquid:			
34A. Minimum (°F)		34B. Maximum (°F)	
35. Average operating pressure range of tank:			
35A. Minimum (psig)		35B. Maximum (psig)	
36A. Minimum Liquid Surface Temperature (°F)		36B. Corresponding Vapor Pressure (psia)	
37A. Average Liquid Surface Temperature (°F)		37B. Corresponding Vapor Pressure (psia)	
38A. Maximum Liquid Surface Temperature (°F)		38B. Corresponding Vapor Pressure (psia)	
39. Provide the following for <u>each</u> liquid or gas to be stored in tank. Add additional pages if necessary.			
39A. Material Name or Composition			
39B. CAS Number			
39C. Liquid Density (lb/gal)			
39D. Liquid Molecular Weight (lb/lb-mole)			
39E. Vapor Molecular Weight (lb/lb-mole)			

Maximum Vapor Pressure 39F. True (psia)			
39G. Reid (psia)			
Months Storage per Year 39H. From			
39I. To			

VI. EMISSIONS AND CONTROL DEVICE DATA (required)

40. Emission Control Devices (check as many as apply): Does Not Apply

- Carbon Adsorption¹
- Condenser¹
- Conservation Vent (psig)
 - Vacuum Setting
 - Pressure Setting
- Emergency Relief Valve (psig)
- Inert Gas Blanket of
- Insulation of Tank with
- Liquid Absorption (scrubber)¹
- Refrigeration of Tank
- Rupture Disc (psig)
- Vent to Incinerator¹
- Other¹ (describe):

¹ Complete appropriate Air Pollution Control Device Sheet.

41. Expected Emission Rate (submit Test Data or Calculations here or elsewhere in the application).

Material Name & CAS No.	Breathing Loss (lb/hr)	Working Loss		Annual Loss (lb/yr)	Estimation Method ¹
		Amount	Units		
Unleaded Gasoline	0.07	0.04	lb/hr	906.10	TANKS

¹ EPA = EPA Emission Factor, MB = Material Balance, SS = Similar Source, ST = Similar Source Test, Throughput Data, O = Other (specify)

Remember to attach emissions calculations, including TANKS Summary Sheets if applicable.

Attachment L
EMISSIONS UNIT DATA SHEET
BULK LIQUID TRANSFER OPERATIONS

Furnish the following information for each new or modified bulk liquid transfer area or loading rack, as shown on the *Equipment List Form* and other parts of this application. This form is to be used for bulk liquid transfer operations such as to and from drums, marine vessels, rail tank cars, and tank trucks.

Identification Number (as assigned on <i>Equipment List Form</i>):				
1. Loading Area Name: Warehouse Fuel Station				
2. Type of cargo vessels accommodated at this rack or transfer point (check as many as apply):				
<input type="checkbox"/> Drums <input type="checkbox"/> Marine Vessels <input type="checkbox"/> Rail Tank Cars <input type="checkbox"/> Tank Trucks <input checked="" type="checkbox"/> Vehicle Fuel Tanks				
3. Loading Rack or Transfer Point Data:				
Number of pumps	1			
Number of liquids loaded	1			
Maximum number of marine vessels, tank trucks, tank cars, and/or drums loading at one time	1			
4. Does ballasting of marine vessels occur at this loading area?				
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Does not apply				
5. Describe cleaning location, compounds and procedure for cargo vessels using this transfer point: N/A				
6. Are cargo vessels pressure tested for leaks at this or any other location?				
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, describe:				
7. Projected Maximum Operating Schedule (for rack or transfer point as a whole):				
Maximum	Jan. - Mar.	Apr. - June	July - Sept.	Oct. - Dec.
hours/day	24	24	24	24
days/week	7	7	7	7
weeks/quarter	13	13	13	13

8. Bulk Liquid Data (add pages as necessary):					
Pump ID No.		1			
Liquid Name		Unleaded Gasoline			
Max. daily throughput (1000 gal/day)		0.10			
Max. annual throughput (1000 gal/yr)		37			
Loading Method ¹		SP			
Max. Fill Rate (gal/min)		10			
Average Fill Time (min/loading)		10			
Max. Bulk Liquid Temperature (°F)		51			
True Vapor Pressure ²		6.6			
Cargo Vessel Condition ³		U			
Control Equipment or Method ⁴		O			
Minimum control efficiency (%)		N/A			
Maximum Emission Rate	Loading (lb/hr)	0.14			
	Annual (lb/yr)	1,220			
Estimation Method ⁵		EPA			
¹ BF = Bottom Fill SP = Splash Fill SUB = Submerged Fill					
² At maximum bulk liquid temperature					
³ B = Ballasted Vessel, C = Cleaned, U = Uncleaned (dedicated service), O = other (describe)					
⁴ List as many as apply (complete and submit appropriate <i>Air Pollution Control Device Sheets</i>): CA = Carbon Adsorption LOA = Lean Oil Adsorption CO = Condensation SC = Scrubber (Absorption) CRA = Compressor-Refrigeration-Absorption TO = Thermal Oxidation or Incineration CRC = Compression-Refrigeration-Condensation VB = Dedicated Vapor Balance (closed system) O = other (describe): Some vehicles may be equipped to capture vapors.					
⁵ EPA = EPA Emission Factor as stated in AP-42 MB = Material Balance TM = Test Measurement based upon test data submittal O = other (describe)					

<p>9. Proposed Monitoring, Recordkeeping, Reporting, and Testing</p> <p>Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.</p>	
<p>MONITORING</p> <p>Monthly gasoline usage.</p>	<p>RECORDKEEPING</p> <p>Monthly gasoline usage.</p>
<p>REPORTING</p> <p>None.</p>	<p>TESTING</p> <p>None.</p>
<p>MONITORING. PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.</p>	
<p>RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.</p>	
<p>REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.</p>	
<p>TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.</p>	
<p>10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty</p> <p>N/A</p>	

**Attachment L
FUGITIVE EMISSIONS FROM UNPAVED HAULROADS**

UNPAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

		PM	PM-10
k =	Particle size multiplier	0.80	0.36
s =	Silt content of road surface material (%)	5.1	5.1
p =	Number of days per year with precipitation >0.01 in.	160	160

Item Number	Description	Number of Wheels	Mean Vehicle Weight (tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips per Hour	Maximum Trips per Year	Control Device ID Number	Control Efficiency (%)
1	Gasoline Supplier	14-18	57.5	<10	3	1	12	water spray	85
2									
3									
4									
5									

Source: AP-42 Fifth Edition – 13.2.2 Unpaved Roads

$$E = k \times 5.9 \times (s \div 12) \times (S \div 30) \times (W \div 3)^{0.7} \times (w \div 4)^{0.5} \times ((365 - p) \div 365) = \text{ lb/Vehicle Mile Traveled (VMT)}$$

Where:

		PM	PM-10
k =	Particle size multiplier	0.80	0.36
s =	Silt content of road surface material (%)	5.1	5.1
S =	Mean vehicle speed (mph)	<10	<10
W =	Mean vehicle weight (tons)	57.5	57.5
w =	Mean number of wheels per vehicle	14-18	14-18
p =	Number of days per year with precipitation >0.01 in.	160	160

For lb/hr: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] = \text{ lb/hr}$

For TPY: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] \times [\text{Ton} \div 2000 \text{ lb}] = \text{ Tons/year}$

SUMMARY OF UNPAVED HAULROAD EMISSIONS

Item No.	PM				PM-10			
	Uncontrolled lb/hr	TPY	Controlled lb/hr	TPY	Uncontrolled lb/hr	TPY	Controlled lb/hr	TPY
1	17.13	0.10	2.57	0.02	4.42	0.03	0.66	0.004
2								
3								
4								
5								
TOTALS	17.13	0.10	2.57	0.02	4.42	0.03	0.66	0.004

FUGITIVE EMISSIONS FROM PAVED HAULROADS

INDUSTRIAL PAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.) *N/A*

I =	Industrial augmentation factor (dimensionless)	
n =	Number of traffic lanes	
s =	Surface material silt content (%)	
L =	Surface dust loading (lb/mile)	

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips per Hour	Maximum Trips per Year	Control Device ID Number	Control Efficiency (%)
1							
2							
3							
4							
5							
6							
7							
8							

Source: AP-42 Fifth Edition – 11.2.6 Industrial Paved Roads

$$E = 0.077 \times I \times (4 + n) \times (s + 10) \times (L + 1000) \times (W + 3)^{0.7} = \text{lb/Vehicle Mile Traveled (VMT)}$$

Where:

I =	Industrial augmentation factor (dimensionless)	
n =	Number of traffic lanes	
s =	Surface material silt content (%)	
L =	Surface dust loading (lb/mile)	
W =	Average vehicle weight (tons)	

For lb/hr: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] = \text{lb/hr}$

For TPY: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] \times [\text{Ton} \div 2000 \text{ lb}] = \text{Tons/year}$

SUMMARY OF PAVED HAULROAD EMISSIONS

Item No.	Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY
1				
2				
3				
4				
5				
6				
7				
8				
TOTALS				

ATTACHMENT M
AIR POLLUTION CONTROL DEVICE SHEET (NOT APPLICABLE)

ATTACHMENT N
SUPPORTING EMISSION CALCULATIONS

**PINNACLE MINING COMPANY, LLC
NSR PERMIT APPLICABILITY DETERMINATION
AIR POLLUTANT SUMMARY**

Criteria Pollutants

Source	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	SO ₂ (tons/yr)	NOx (tons/yr)	CO (tons/yr)	VOC (tons/yr)
Gasoline Storage Tank	0.10	0.10	0.10	---	---	---	0.88
Rock Dust Bins	0.02	0.00	0.00	---	---	---	---
Roadways	0.11	0.10	0.10	---	---	---	0.88

Hazardous Air Pollutants (HAPs)

Source	2,2,4-Trimethylpentane (tons/yr)	Benzene (tons/yr)	Biphenyl (tons/yr)	Cresols (tons/yr)	Cumene (tons/yr)	Ethylbenzene (tons/yr)
Gasoline Storage Tank	8.41E-03	5.52E-03	0.00E+00	5.73E-06	1.38E-04	5.57E-04
Rock Dust Bins	---	---	---	---	---	---
Roadways	---	---	---	---	---	---
Total	8.41E-03	5.52E-03	---	5.73E-06	1.38E-04	5.57E-04

Hazardous Air Pollutants (HAPs) - continued

Source	Hexane (tons/yr)	Naphthalene (tons/yr)	Phenol (tons/yr)	Styrene (tons/yr)	Toluene (tons/yr)	Xylene (tons/yr)	Total HAP (tons/yr)
Gasoline Storage Tank	3.91E-02	4.85E-06	9.70E-07	7.78E-04	7.43E-03	2.07E-03	6.40E-02
Rock Dust Bins	---	---	---	---	---	---	---
Roadways	---	---	---	---	---	---	---
Total	3.91E-02	4.85E-06	9.70E-07	7.78E-04	7.43E-03	2.07E-03	6.40E-02

**PINNACLE MINING COMPANY, LLC
NSR PERMIT APPLICABILITY DETERMINATION
VOC EMISSIONS FROM GASOLINE STORAGE TANKS (BREATHING/WORKING LOSSES)**

Storage Tank	Capacity (gal)	Throughput (gal/yr) A	VOC Emissions				VOC Emissions (lb/day) E	VOC Emissions (tons/day) F	VOC Emissions (lb/hr) G	VOC Emissions (tons/hr) H
			Working Losses (lb/yr) B	Breathing Losses (lb/yr) B	Total Losses (lb/yr) C	Total Losses (tons/yr) D				
Gasoline Storage Tank D-16	3,065	37,000	328.67	577.43	906.10	0.45	2.48	0.001	0.10	0.000052

AIR TOXIC SPECIATION PROFILE*

Pollutant	Percentage* (wt%)	Emissions (tons/yr)
2,2,4-Trimethylpentane	0.95	4.32E-03
Benzene	0.63	2.83E-03
Biphenyl	0.00000	0.00E+00
Cresols	0.0007	2.94E-06
Cumene	0.02	7.09E-05
Ethylbenzene	0.06	2.86E-04
Hexane	4.43	2.01E-02
Napthalene	0.001	2.49E-06
Phenol	0.000	4.98E-07
Styrene	0.088	3.99E-04
Toluene	0.84	3.82E-03
Xylene	0.24	1.06E-03
Combined HAPS		3.29E-02

ESTIMATED TANK DIMENSIONS

Length	Radius	Diam.	Volume	Volume
ft	ft	ft	ft ³	gal
18.33	2.67	5.33	410	3,065

NOTES:

- A: Potential fuel usage based on one turnover per month.
- B: Emission values obtained from USEPA TANKS v4.09b.
- C = Sum of B
- D = C / 2000
- E = C / 365
- F = D / 365
- G = C / 8760
- H = D / 8760

* Speciation profile obtained from Radian Corporation report prepared for J.F. Durham, USEPA (August 10, 1993), regarding liquid and vapor HAP concentrations of various petroleum products.

PINNACLE MINING COMPANY, LLC
NSR PERMIT APPLICABILITY DETERMINATION
VOC EMISSIONS FROM GASOLINE TANK LOADING, DISPENSING, AND SPILLAGE

Storage Tank	Capacity (gal)	Throughput (gal/yr) A	Annual VOC Losses			VOC Emissions (lb/yr) E	VOC Emissions (tons/yr) F	VOC Emissions (lb/day) G	VOC Emissions (tons/day) H	VOC Emissions (lb/hr) I	VOC Emissions (tons/hr) J
			Tank Loading (lb/10 ³ gal) B	Vehicle Refueling (lb/10 ³ gal) C	Spillage (lb/10 ³ gal) D						
Gasoline Storage Tank D-20	3,065	37,000	11.5	11.0	0.70	858	0.43	2.35	0.001	0.10	0.0000

AIR TOXIC SPECIATION PROFILE*

Pollutant	Percentage* (wt%)	Emissions (tons/yr)
2,2,4-Trimethylpentane	0.95	4.09E-03
Benzene	0.63	2.68E-03
Biphenyl	0	0.00E+00
Cresols	0.00065	2.79E-06
Cumene	0.016	6.72E-05
Ethylbenzene	0.063	2.71E-04
Hexane	4.43	1.90E-02
Naphthalene	0.00055	2.36E-06
Phenol	0.00011	4.72E-07
Styrene	0.089	3.78E-04
Toluene	0.84	3.61E-03
Xylene	0.24	1.01E-03
Combined HAPS		3.11E-02

NOTES:

- A: Potential fuel usage based on one turnover per month.
- B: Emission factor from AP-42 Table 5.2-7 (06/2008) for splash filling.
- C: Emission factor from AP-42 Table 5.2-7 (08/2008) for controlled displacement losses.
- D: Emission factor from AP-42 Table 5.2-7 (06/2008) for spillage.
- E = (B + C + D) * A
- F = E / 2000
- G = E / 365
- H = F / 365
- I = E / 8760
- J = F / 8760

* Speciation profile obtained from Radian Corporation report prepared for J.F. Durham, USEPA (August 10, 1983), regarding liquid and vapor HAP concentrations of various petroleum products.

**PINNACLE MINING COMPANY, LLC
NSR PERMIT APPLICABILITY DETERMINATION
EMISSION CALCULATIONS FOR ROCK DUST STORAGE**

Rock Dust Bins D-17										
Pollutant	Emission Factor (lb/ton) A	Max. Delivery Op Schedule (hr/yr) B	Max. Delivery Transfer Rate (tons/hr) C	Uncontrolled Emissions (lb/yr) D	Uncontrolled Emissions (lb/hr) E	Uncontrolled Emissions (tons/yr) F	Control Efficiency (%) G	Controlled Emissions (lb/hr) H	Controlled Emissions (lb/day) I	Controlled Emissions (tons/yr) J
PM	0.61	41.6	25	634.46	15.25	0.32	90	1.53	6.10	0.03

Rock Dust Bins D-18										
Pollutant	Emission Factor (lb/ton) A	Max. Delivery Op Schedule (hr/yr) B	Max. Delivery Transfer Rate (tons/hr) C	Uncontrolled Emissions (lb/yr) D	Uncontrolled Emissions (lb/hr) E	Uncontrolled Emissions (tons/yr) F	Control Efficiency (%) G	Controlled Emissions (lb/hr) H	Controlled Emissions (lb/day) I	Controlled Emissions (tons/yr) J
PM	0.61	41.6	25	634.46	15.25	0.32	90	1.53	6.10	0.03

Rock Dust Bins D-19										
Pollutant	Emission Factor (lb/ton) A	Max. Delivery Op Schedule (hr/yr) B	Max. Delivery Transfer Rate (tons/hr) C	Uncontrolled Emissions (lb/yr) D	Uncontrolled Emissions (lb/hr) E	Uncontrolled Emissions (tons/yr) F	Control Efficiency (%) G	Controlled Emissions (lb/hr) H	Controlled Emissions (lb/day) I	Controlled Emissions (tons/yr) J
PM	0.61	41.6	25	634.46	15.25	0.32	90	1.53	9.15	0.03

NOTES:

The rock dust bins have the following storage capacity: D-17 100 tons, D-18 100 tons, and D-19 150 tons.

A: Obtained from AP-42, Section 11.17, Table 11.17-4, Product loading to an enclosed truck

B: Total 2014 Rock Dust Delivered: 1,549

2014 Rock Dust Delivered Per Bin: 516.4

2014 Raw Coal Production: 3,922,389

Maximum Permit Raw Coal Production: 7,900,000

Estimated Maximum Rock Dust Delivered Per Bin: 1,040.1

C: Maximum transfer rate of rock dust from a truck to the silo supplied by vender.

D = A * B * C

E = A * C

F = D / 2000 [lb/ton]

G: Control efficiency specification for the product loss prevention system, which was obtained from the bin vent manufacturer, is the minimum control efficiency achievable during startup based on a MERV 13 filter.

H = E * (1 - (G / 100))

I = (Bin Capacity / C) * H

J = F * (1 - (G / 100))

**PINNACLE MINING COMPANY, LLC
NSR PERMIT APPLICABILITY DETERMINATION
PARTICULATE MATTER EMISSIONS FROM UNPAVED ROADWAYS**

Vehicle Type	s	W	Particulate Emission Factor lbs/VMT	PM10 Emission Factor lbs/VMT	PM2.5 Emission Factor lbs/VMT
1] Gasoline Supplier	5.1	57.5	5.71	1.47	0.15

Vehicle Type	VMT/yr	Control Efficiency (%)	Controlled Particulate Emissions (ton/yr)	Controlled PM10 Emissions (ton/yr)	Controlled PM2.5 Emissions (ton/yr)
1] Gasoline Supplier	36	85	0.02	0.004	0.0004

Notes:

Emission Factor is from AP-42, Section 13.2.2 (November, 2006), Equation 2 (with p=160 days with 0.01 inches of precipitation per year).
The values for the parameters s, W, M and S listed in the table above are from the sources listed below :

Emission Factor (lbs/VMT) = $[k * (s / 12)^a * (W / 3)^b]$

W] is mean vehicle weight (tons)

s is from AP-42 Table 13.2.2-1 for western surface coal mining

k, a, and b for particulate, PM10, and PM2.5 (not shown above) is from AP42 Table 13.2.2-2

Vehicle Miles Traveled (VMT) were obtained as follows:

1 Vehicle miles traveled per year are based on a 3 mile round trip and 12 trips per year.

Control efficiencies as follows (per WVOAQ guidance):

85% for water truck; manufactured, pressurized water/chemical sprays

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification
 User Identification: Pinnacle Warehouse Gasoline Tank
 City: Pineville
 State: West Virginia
 Company: Pinnacle Mining Company, LLC
 Type of Tank: Horizontal Tank
 Description: Warehouse Unleaded Fuel Tank D-20 - Jan. 2014

Tank Dimensions
 Shell Length (ft): 18.35
 Diameter (ft): 6.33
 Volume (gallons): 3,066.00
 Turnovers: 12.07
 Net Throughput(gal/yr): 37,000.00
 Is Tank Heated (Y/N): N
 Is Tank Underground (Y/N): N

Paint Characteristics
 Shell Color/Shade: White/White
 Shell Condition: Good

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Beckley, West Virginia (Avg Atmospheric Pressure = 14.25 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

Pinnacle Warehouse Gasoline Tank - Horizontal Tank
Pineville, West Virginia

Mixture/Component	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)			Vapor Pressure (psia)			Vapor Mol. Weight		Liquid Mass Fract.		Vapor Mass Fract.		Mol. Weight	Basis for Vapor Pressure Calculations
	Month	Max.	Min.	Avg.	Max.	Min.	Avg.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
Gasoline (RVP 13)	All	52.42	47.81	50.92	57.23	50.92	6.0175	5.4812	6.6948	82.0000	82.0000	82.0000	82.0000	82.0000	82.0000	82.0000	Option 4: RVP=13, ASTM Slopes=3

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

Pinnacle Warehouse Gasoline Tank - Horizontal Tank
Pineville, West Virginia

Annual Emission Calculations

Standing Losses (lb): 577.4289
 Vapor Density (lb/cu ft): 280.0000
 Vapor Space Expansion Factor: 0.0175
 Vented Vapor Saturation Factor: 0.5406

Tank Vapor Space Volume: 280.0000
 Vapor Space Volume (cu ft): 5.3300
 Tank Diameter (ft): 11.1500
 Effective Diameter (ft): 2.8850
 Vapor Space Cubage (ft): 18.3300
 Tank Shell Length (ft): 18.3300

Vapor Density: 0.0175
 Vapor Density (lb/cu ft): 62.0000
 Vapor Molecular Weight (lb/lb-mole): 0.0175
 Vapor Pressure at Daily Average Liquid Surface Temperature (psia): 512.0888
 Daily Avg. Liquid Surface Temp. (deg. R): 50.8000
 Ideal Gas Constant R: 10.731
 (cells soft) (lb-mol-deg R): 510.5800
 Liquid Bulk Temperature (deg. R): 0.1700
 Tank Paint Solar Absorbance (Shell): 1.123.3333
 Daily Net Rainfall In/Out: 0.0000
 Factor (Shell only): 0.0000

Vapor Space Expansion Factor: 0.1655
 Daily Vapor Temperature Range (deg. R): 19.2311
 Vapor Temperature Range (deg. R): 1.0000
 Breather Vent Press. Scaling Range (psia): 0.0800
 Vapor Pressure at Daily Average Liquid Surface Temperature (psia): 6.0175
 Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia): 5.4612
 Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia): 6.8848
 Daily Avg. Liquid Surface Temp. (deg. R): 512.0888
 Daily Mix. Liquid Surface Temp. (deg. R): 507.2821
 Daily Avg. Liquid Surface Temp. (deg. R): 616.8978
 Daily Ambient Temp. Range (deg. R): 18.2853

Vented Vapor Saturation Factor: 0.5406
 Vapor Pressure at Daily Average Liquid Surface Temperature (psia): 4.0175
 Vapor Space Cubage (ft): 2.8850

Working Losses (lb): 328.8744
 Vapor Molecular Weight (lb/lb-mole): 62.0000
 Vapor Pressure at Daily Average Liquid Surface Temperature (psia): 5.0175
 Annual Net Throughput (gal/yr): 37,000.0000
 Annual Turnover: 12.0718
 Turnover Factor: 1.0000
 Tank Diameter (ft): 5.3300
 Working Loss Product Factor: 1.0000

Total Losses (lb): 906.0892

**TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals**

Emissions Report for: Annual

**Pinnacle Warehouse Gasoline Tank - Horizontal Tank
Pineville, West Virginia**

Component(s)	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Gasoline (RVP 13)	328.67	577.43	906.10

ATTACHMENT O
MONITORING/RECORDKEEPING/REPORTING/TEST PLAN
(NOT APPLICABLE)

**ATTACHMENT P
PUBLIC NOTICE (NOT APPLICABLE)**

ATTACHMENT Q
BUSINESS CONFIDENTIAL CLAIMS (NOT APPLICABLE)

**ATTACHMENT R
AUTHORITY FORM**

**Attachment R
AUTHORITY OF CORPORATION
OR OTHER BUSINESS ENTITY (DOMESTIC OR FOREIGN)**

TO: The West Virginia Department of Environmental Protection,
Division of Air Quality

DATE: April, 2015

ATTN.: Director

Corporation's / other business entity's Federal Employer I.D. Number 06-1697880

The undersigned hereby files with the West Virginia Department of Environmental Protection, Division of Air Quality, a permit application and hereby certifies that the said name is a trade name which is used in the conduct of an incorporated business or other business entity.

Further, the corporation or the business entity certifies as follows:

(1) Jon Lester (is/are) the authorized representative(s) and in that capacity may represent the interest of the corporation or the business entity and may obligate and legally bind the corporation or the business entity.

(2) The corporation or the business entity is authorized to do business in the State of West Virginia.

(3) If the corporation or the business entity changes its authorized representative(s), the corporation or the business entity shall notify the Director of the West Virginia Department of Environmental Protection, Division of Air Quality, immediately upon such change.



President or Other Authorized Officer
(Vice President, Secretary, Treasurer or other
official in charge of a principal business function of
the corporation or the business entity)

(If not the President, then the corporation or the business entity must submit certified minutes or bylaws stating legal authority of other authorized officer to bind the corporation or the business entity).

Secretary

Pinnacle Mining Company, LLC
Name of Corporation or business entity

ATTACHMENT S
TITLE V PERMIT REVISION INFORMATION (NOT APPLICABLE)